

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A light curtain generating device, comprising a light emitting pillar assembly accommodating an array of light emitting units within a pillar case and a light receiving pillar assembly accommodating an array of light receiving units within a pillar case, the light emitting pillar assembly and light receiving pillar assembly being placed opposite to each other so as to form a light curtain for detecting an object between the pillar assemblies, characterized in that:

the light emitting unit array and light receiving unit array accommodated in the respective pillar cases each comprise a group of single-beam optical modules,

each single-beam optical module comprising a single light emitting unit or a single light receiving unit comprising a lens, an optical element and a holder integrally incorporated with the lens and optical element so as to align the lens and optical element with a prescribed optical axial line, and the holder being separated from holders of other single-beam optical modules,

each pillar case accommodating a base frame defining mounting positions for a plurality of single-beam optical modules, and

each single-beam optical module being mounted in the mounting position of the base frame.

2. (Original) A light curtain generating device according to claim 1, wherein each opposing pair of a light emitting unit and a light receiving unit perform a detecting action in a prescribed order.

3. (Canceled)

4. (Previously Presented) A light curtain generating device according to claim 1, wherein the holder is made of plastic material.

5. (Currently Amended) ~~A light curtain generating device according to claim 4~~ A light curtain generating device, comprising a light emitting pillar assembly accommodating an array of light emitting units within a pillar case and a light receiving pillar assembly accommodating an array of light receiving units within a pillar case, the light emitting pillar assembly and light receiving pillar assembly being placed opposite to each other so as to form a light curtain for detecting an object between the pillar assemblies, characterized in that:

the light emitting unit array and light receiving unit array accommodated in the respective pillar cases each comprise a group of single-beam optical modules,

each single-beam optical module comprising a single-light emitting unit or a single light receiving unit comprising a lens, an optical element and a holder integrally incorporated with the lens and optical element so as to align the lens and optical element with a prescribed optical axial line, and the holder being separated from holders of other single-beam optical modules,

each pillar case accommodating a base frame defining mounting positions for a plurality of single-beam optical modules, and

each single-beam optical module being mounted in the mounting position of the base frame,

wherein the holder is made of plastic material, wherein the lens and optical element are jointed to the plastic holder by snap fit arrangements.

6. (Canceled)

7. (Previously Presented) A light curtain generating device according to claim 1, wherein the base frame comprises a metallic plate member, and each single-beam optical module is attached to the metallic plate at a side of the single-beam optical module extending in parallel with the optical axial line.

8. (Currently Amended) ~~A light curtain generating device according to claim 7~~ A light curtain generating device, comprising a light emitting pillar assembly accommodating an

array of light emitting units within a pillar case and a light receiving pillar assembly accommodating an array of light receiving units within a pillar case, the light emitting pillar assembly and light receiving pillar assembly being placed opposite to each other so as to form a light curtain for detecting an object between the pillar assemblies, characterized in that:

the light emitting unit array and light receiving unit array accommodated in the respective pillar cases each comprise a group of single-beam optical modules,

each single-beam optical module comprising a single light emitting unit or a single light receiving unit comprising a lens, an optical element and a holder integrally incorporated with the lens and optical element so as to align the lens and optical element with a prescribed optical axial line, and the holder being separated from holders of other single-beam optical modules,

each pillar case accommodating a base frame defining mounting positions for a plurality of single-beam optical modules, and

each single-beam optical module being mounted in the mounting position of the base frame,

wherein the base frame comprises a metallic plate member, and each single-beam optical module is attached to the metallic plate at a side of the single-beam optical module extending in parallel with the optical axial line, wherein each single-beam optical module is attached to the metallic plate by a snap fit arrangement.

9. (Previously Presented) A light curtain generating device according to claim 1, further comprising a circuit board having a plurality of optical element mountable positions, and signal processing means for electrically and selectively disabling the optical element mountable positions.

10-12. (Canceled)

13. (Previously Presented) A light curtain generating device according to claim 1, wherein each pillar case accommodates at least two base frames arranged in series along a length of the pillar.

14. (Original) A light curtain generating device according to claim 13, wherein the mounting positions of the two base frames have different pitches.

15. (Previously Presented) A light curtain generating device according to claim 13, wherein the two base frames have different numbers of mounting positions.

16. (Previously Presented) A light curtain generating device according to claim 13, wherein the two base frames have different lengths.

17. (Previously Presented) A light curtain generating device according to claim 13, wherein the base frames comprise metallic plate members.

Amendments to the Drawings:

The drawing sheet attached in connection with the above-identified application containing Figure 18 is being presented as a new formal drawing sheet to be substituted for the previously submitted drawing sheet. The formal drawing sheet containing Figure 18 includes the amendment of February 20, 2003, which has been approved by the Examiner.